

State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Engineering Division  
Honolulu, Hawaii 96813

October 12, 2007

Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii

**Request Approval of DLNR Dam Permit No. 20  
Alexander Dam (HI-98) Emergency Repairs to Spillway**

The downstream portion of the Alexander Dam Spillway failed as a result of the heavy rains and runoff experienced during the Floods of March 2006. Kauai Coffee Company, a subsidiary company of Alexander & Baldwin, Inc. (A&B) and owners of the reservoir, took steps to lower the water level in the reservoir and installed twin 12" pipe siphons to assist in maintaining the lower water level in the reservoir until necessary repairs could be undertaken. If repairs to the spillway are not undertaken, continued flows in the spillway could potentially erode the spillway back to the reservoir and cause the failure of the dam structure.

Due to the complexity of this project, A&B has undertaken a design build approach to repair the spillway before the next rainy season. A&B has kept the Department of Land and Natural Resources, Engineering Division (Department) apprised as to their designs and remediation efforts and have proceeded with the progression of related portions of the repairs as allowed in the Governor's Emergency Proclamation for the March 2006 Floods.

A&B's consultant LFR, Inc. has completed pre-final plans of the repairs and submitted them to the Department for review and approval of a dam safety alteration permit. The Department along with their consultant, GEI, Inc., has reviewed the plans and recommends approval of the proposed repair plans.

Chapter 179 - Dams and Reservoirs authorizes the Board of Land and Natural Resources to issue permits for new construction, alterations, repairs and removal of regulated dams in the State.

**RECOMMENDATION:**

That the Board of Land and Natural Resources approve the following:

1. Authorize and direct the Chairperson, to issue a dam safety permit for the emergency spillway repairs and related work to Alexander Dam as detailed in their permit application, DLNR Dam Permit No. 20.

Respectfully submitted,

  
ERIC T. HIRANO  
Chief Engineer

APPROVED FOR SUBMITTAL:

  
LAURA H. THIELEN, Chairperson

**ITEM L-4**